

Marine Corps Official Outlines Crucial Near-Term Tech Needs

Nonlethal weapons and underwater mine detectors are crucial technologies needed by U.S. military forces, a Marine Corps official said Aug. 5 at the Naval-Industry R&D Partnership conference in Washington.

Maj. Gen. Kevin Kuklok, assistant deputy commandant for plans, policies and operations, offered industry members a short wish list of things that are "simple to talk about and not simple to do.

"For example, we can kill a tank at 20 miles, but we can't stop a vehicle at 100 meters. If you read the news, you know why that's become very, very important in a couple of theaters that we've operated in," he said, referring to incidents at military checkpoints overseas in which U.S. soldiers have been forced to fire on vehicles that would not stop.

Similarly, "we can shoot individuals from over a mile [away], but we cannot quickly incapacitate them even for a few seconds beyond [a short distance]," he said.

Given the minute-by-minute press coverage of current operations, Kuklok speculated that an incident in which large numbers of people were "somehow contained" by nonlethal weapons rather than killed with kinetic weapons might create "a great groundswell for nonlethal weapons as we move into the 21st century. We think that's an area ... that's got some great growth potential."

Awareness around ships

In the area of force protection, Kuklok offered other examples of problems plaguing maritime forces.

"We can engage submarines from miles [away], but we can't figure out how to find and repel swimmers," he said. "We can locate diamonds and gold thousands of feet below the surface, we can find oil thousands of miles out to sea, but we can't find a mine that's on the surface and we can't find it in three feet of water."

Kuklok said other Marine Corps-specific technology needs include:

- Portable Beyond-Line-of-Sight (BLOS) communications
- Lighter body armor
- Self-sealing hulls, particularly for small boats
- Better battery technology
- More efficient distribution of liquids such as water and fuel
- Reduction of fratricide

The chief of naval research, Rear Adm. Jay Cohen, told attendees the responsibility lies with industry to provide solutions for problems such as those outlined by Kuklok.

"This is part of the partnership conference," Cohen said. "It's about establishing requirements, it's about establishing lines of communication. The money is there. The will is there. The priority is there. All we ask is for the solutions."

- *Jefferson Morris*